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How Canada Wins From Global Services Outsourcing

Danielle Goldfarb

In this issue...

Canadian decision makers should not fear global outsourcing of service functions, nor try to discourage it. The country benefits from two-way global trade in service components, which is little different in effect from trade across the street, or trade in manufactured components. Policymakers should respond to the phenomenon by enhancing both Canadian competitiveness and workers' ability to adjust.

The Study in Brief

Outsourcing of services globally — commonly understood as the practice of companies sending service functions to be done more efficiently abroad — is a topic of heated debate in the U.S., fueled by job losses in recent years. Because technology makes it possible and attractive to purchase information technology (IT) and other services abroad, some observers say that developed countries could lose large numbers of skilled service jobs to workers in less-developed, lower-cost regions.

This *Commentary* cuts through the debate to assess where Canada fits into the picture of global services outsourcing. According to limited available data, Canada is currently a prime destination for companies that outsource some of their service functions globally. Moreover, Canada's employment record over the past few years does not give cause for alarm about outsourcing. And global services outsourcing activity appears to assume a much smaller economic role than some public commentaries indicate. Indeed, most services still have to be provided locally.

Acquiring a service function from abroad is no different in principle from trade that takes place across the street. Nor is it different from trading manufactured components, say auto parts, across the Canada-U.S. border. As with all trade, there may be painful short-term dislocation for some who lose their jobs. But overall, gains are likely to disperse across the economy in terms of lower component prices for firms, lower final prices for consumers, and higher living standards both in Canada and in developing countries.

There is much we do not yet know about current and future global services outsourcing developments. Still, some priorities are clear. Governments should not restrict companies' ability to invest and acquire service components from where they can be produced most efficiently. Instead, the public and private sectors must invest in those areas that make Canada an attractive destination for global outsourcing, and that enhance workers' ability to adjust. This includes education and skills development, further services liberalization and other steps to improve competitiveness. Ottawa must also be vigilant in protecting its interests against any U.S. measures that discourage outsourcing or investment abroad.

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U.S. job losses in recent years have fueled anxiety in that country about global outsourcing — the practice of acquiring component parts or service functions from abroad. During the election campaign, Democratic presidential nominee John Kerry criticized "Benedict Arnold CEOs who send American jobs overseas", and his running mate John Edwards vigorously blamed global outsourcing for job losses. Lou Dobbs, who hosts a CNN show, "Exporting America", maintains a constant harangue against U.S. companies that send jobs to India and China. At the same time, at least 13 federal and over 100 state proposals aim to restrict the scope for global outsourcing.

Cheaper long distance costs and the ability to digitize production enable call center services, medical diagnostics, and software development to now be provided from anywhere in the world. As a result, some commentators express growing concern that global outsourcing will lead to large numbers of permanent job losses for skilled, well-paid service workers.

In Canada, critics are far less vocal, though some observers argue that there is genuine reason for concern. In 2004, the *National Post* published a series of columns called "Exporting Jobs", while a headline on a column in the *Toronto Star* read: "Outsourcing: Our Next Challenge".[1] Meanwhile PricewaterhouseCoopers warned in a study that Canada could lose 75,000 information technology service jobs to global outsourcing by 2010.

This *Commentary* attempts to put what is largely an anecdotal discussion in perspective by examining the limited available evidence on Canada and global outsourcing. The paper is a beginning, rather than an exhaustive study of all data, trends and issues, and focuses on services instead of manufactures, to respond to the recent debate.

The paper contends that Canada should not share concerns expressed by some in the U.S. about global outsourcing. Currently, Canada appears to be a prime *destination* for companies that outsource some of their service functions globally. Canada's employment record over the past few years does not suggest cause for concern, and global services outsourcing activity is likely much more limited than public commentaries suggest. Indeed, most services still have to be provided locally. If the trend accelerates and Canadian companies increasingly send business segments to be produced by their foreign affiliates or other firms abroad, gains are likely to flow across the economy in terms of lower component prices for companies, lower final prices for consumers, and higher living standards, both in Canada and in developing countries.

Acquiring a service function from abroad is no different in principle from trade that takes place across the street. The results — short-term dislocation for some and overall long-term net benefits — are likely to be the same. Nor are the characteristics and consequences of trading a service function to another country

I wish to thank Alan Alexandroff, Shenjie Chen, Wendy Dobson, Robert Ready, and Bill Robson for helpful comments on a previous draft of this paper.

1 See Jacqueline Thorpe. 2004. "Is your job safe?: Burgeoning Asian Economies Boast Talented Workers at a Fraction of the Price of Canadian Counterparts." *National Post*. Series: Exporting Jobs. April 13. FP1, and Carol Goar. 2004. "Outsourcing: Our Next Challenge." *Toronto Star*. April 26. A18.

different than trading manufactured components, say auto parts, internationally. In both cases, multinationals and other companies have reorganized production along global supply chains, so that each element is produced where it can be done most efficiently. Just as large reductions in transport costs and tariff barriers in recent decades have created situations where manufactured parts are often more efficiently traded across national borders, declines in telecommunications costs and the ability to digitize service functions now enable companies to outsource call centre and IT services across borders.

There is much we do not yet know about current and future global services outsourcing developments. Though the data have limitations, some priorities are clear. Rather than restrict global outsourcing, the public and private sectors should invest in education and skills development, enhancing workers' ability to adjust and Canada's capacity to compete for service functions. To further attract outsourced activity, policymakers should take measures to improve domestic competitiveness and further liberalize trade in services. And Canada must attempt to forestall U.S. measures that restrict outsourcing abroad.

The Facts About Outsourcing

There is no commonly agreed definition of the terms outsourcing and offshoring. They tend to be used interchangeably and often mean different things to different people.[2] For simplicity and to address the trend of public and political concern, in this paper I use the term global outsourcing to refer to acquiring globally business functions and component parts that go into the production of final goods and services. In-sourcing refers to the provision of those components.

Rather than being a radical new development as recent attention suggests, global services outsourcing is a form of trade[3]. The traditional conception of trade consists of cross-border exchanges of final products. But trade also takes place within countries, and increasingly in intermediate products, as well as final goods. Companies have been fragmenting production within national borders for many years, locating component production wherever it can be performed most efficiently — whether across the street or across the country.

With further advances in IT, reductions in trade barriers, and declines in transportation costs, companies developed global supply chains and began to acquire intermediate components internationally — either within the same firm through an affiliate, or from an independent company — from wherever they

2 To reduce confusion, I generally avoid the terms offshoring and nearshoring in this paper. Offshoring generally refers to parent companies trading business segments with foreign affiliates or other overseas firms, but sometimes it appears to be a catch-all phrase for all activity traded outside of the parent company's home country, even if not technically to offshore locations. The term nearshoring describes components purchased from neighbouring countries, such as from the U.S. to Canada and Mexico, or from Britain to Ireland.

3 In a sense, all trade is essentially outsourced production. I might choose to buy dinner rather than make it myself, outsourcing the production of that dinner to a nearby restaurant. Similarly, I might buy, rather than make, my own television, outsourcing production to, say, a company based in China. Peter Foster argues along these lines in, "I offshored my cheese!", *National Post*. April 16, 2004. FP15.

could be produced most efficiently. Feenstra (1998) discusses the rapid growth in global outsourcing and trade in intermediate components for manufactures in recent decades.

The global fragmentation — or the globalization — of service production is the next phase in this evolution. Declining transportation costs expanded the range of component parts that it made sense to trade across national borders. Similarly, declines in global telecommunications costs and technological advances that make digitization possible enable many business segments that could formerly only be produced locally or traded through the movement of individuals to be produced anywhere.

Though most service functions — such as restaurants, hotels and retail — must still be produced where they are consumed, in future, national borders will be much less important in determining where to locate service functions. Software development, telemarketing, data entry, and medical transcription, for example, may now be handled globally as part of the provision of a company's larger goods or services packages. As technology improves, companies will be able to import smaller and smaller business segments from wherever in the world they can be produced most efficiently.

Some economists define outsourcing as buying a business segment or component from an independent subcontractor (see, for example, Antràs and Helpman 2004). Concerned workers, however, do not distinguish between components that are purchased at arm's length from the company and those that are traded between a parent company and its foreign affiliate. Since the economic results from intra-company trade are likely to be the same as those from arm's length transactions, global services outsourcing in this paper refers to trading business segments both within multinationals across borders and between companies — multinationals and others — and independent subcontractors abroad.

It is important also to note that, though a U.S. company could set up an affiliate abroad through foreign direct investment (FDI) and that affiliate's activity could include in-sourcing back to its parent, global outsourcing of service functions, though related, is distinct from FDI.

The Economic Consequences of Outsourcing

Importing goods and services and their component parts from where they can be produced most efficiently is likely to improve overall economic welfare. Multinationals and other companies orient along global supply chains where they break down production into smaller pieces, producing each individual segment wherever it is most cost-efficient.

Because all countries have a comparative advantage — even if not all have absolute advantages — in the production of some goods and services, according to theory a trading country will specialize in those industries that, at world prices, it is relatively better at producing. Specialization results in more final output with lower-cost components. This increases productivity, reduces prices, and raises living standards. These gains from trade apply to trade in final products and components, trade within companies and at arm's length, as well as to exchanges

within a country and between countries. As well, when companies outsource globally, they can shift their domestic operations towards more productive and higher-value activities.

The economic upshot of global service outsourcing is very similar to that from global trade in component parts — such as car or airplane parts — used to manufacture final goods. Both result in short-term economic dislocation for some and long-term net economic benefits across the economy. The results of global service outsourcing are also similar to those of other structural changes that dynamic economies have experienced over recent decades, such as advances in technology. Both are driven by competitive pressures to reduce costs (Brainard and Litan 2004) and both increase productivity, real income and growth.

Work by Catherine Mann (2003) shows that global outsourcing can increase gross domestic product (GDP). By her calculations, outsourcing information technology production from the U.S. reduced IT hardware prices by as much as 30 percent, accelerated productivity growth and boosted U.S. GDP by US$230 billion from 1995 to 2002. Gains from globalization of IT production in terms of reduced prices and increased productivity are also diffused throughout the economy into non-IT jobs. Mann argues that globalization of IT services is likely to have a similar effect.

Global outsourcing also improves living standards in such developing countries as India that have successfully attracted work from abroad. Not only is this desirable in its own right, but as developing country economies grow, they will increasingly become export markets for North American goods, improving North American incomes. The related productivity gains from global outsourcing may also help offset some of the effects of an aging population.

As companies outsource production globally or domestically, in the short term some workers may lose their jobs. Job losses are painful for the affected workers who have to search for new employment, and they may disproportionately affect certain regions, sectors, and companies. In the longer run, lower production costs reduce the price of the firm's goods or services, increasing consumers' purchasing power. This, in turn, increases demand, stimulating output and providing jobs in other companies, though not necessarily in the same sectors that experienced the short-term job losses.

Job losses must also be considered in the context of a dynamic economy, such as Canada's, that creates and destroys jobs all the time. An OECD study (1994) showed that Canada creates and destroys jobs frequently, while still recording only small changes in yearly employment. From 1983 to 1991, net employment changed by less than an annual average of 3 percent, while job turnover (job gains plus job losses) averaged 26 percent of total employment annually. For developed economies, the size of the usual labour market flows dwarfs the number of job losses associated with global outsourcing (OECD 2004).

Moreover, the notion that outsourcing a service function abroad automatically means a domestic job loss is false. If outsourcing globally were not an option, many companies would not necessarily employ a domestic worker, but instead look for other ways to reduce costs or scale back their services. Also, being able to outsource service functions globally may prevent the loss of domestic jobs by keeping companies competitive in world markets. And, to the extent that workers

in Canada are able to move within regions of the country or, in some sectors, to the U.S., they have an option to relocate if production does shift. In the long term, global outsourcing, rather than eliminating large numbers of jobs, is likely to lead to a reshuffling and a different composition of jobs in the economy.

The Global Picture

The U.S. is the world's largest commercial services importer, and U.S. companies account for 70 percent of global services outsourcing, with Europe (primarily the U.K.) and Japan accounting for the remainder of the market (MGI 2003). Despite a perception that China and India are the primary in-sourcing countries, OECD members are currently the primary destinations for business services outsourcing activity (Mattoo and Wunsch 2004), even with higher labour costs than developing countries. Until now, developed countries have attracted a much higher stock of FDI related to global services outsourcing than developing countries (UNCTAD 2004). Canada attracts in-sourcing activity partly because of its proximity to the U.S. market, slightly lower costs than in the United States, a transparent, predictable, rule-driven system of government, similar time zones and a well-educated, mainly English-speaking population.

Developing economies are, however, growing rapidly in importance as outsourcing destinations for services. Service exports — which would include in-sourcing activity -- in such countries as India, Brazil, Israel and China, have been growing much faster than those in the OECD countries. Asia appears to be an increasingly important destination: The region's services exports grew by 7 percent in 2002 and 15.5 percent in 2003, with 17 percent growth projected for 2004 (Renaud 2004). World Trade Organization (WTO) data show that in 2002 China's services exports rose by 22 percent, India's by 13 percent and the Philippines by 10 percent. In terms of software development, India is the undisputed leader with two-fifths of Fortune 500 companies outsourcing software requirements to that country (Mattoo and Wunsch 2004). A Deloitte study (2003) ranked India, China, Eastern Europe, Mexico and Canada as the top five "current and hypothetical offshore locations" for communications operators.

Global services outsourcing is essentially about global companies trading through global supply chains. Companies often acquire service components from a combination of countries, including both developing and developed nations. In 2004, for example, British car insurer Cox Insurance Holdings outsourced its information technology requirements to Montreal-based CGI group, which uses its facilities in Britain, Canada and India to provide the services. Indian companies that attract global services outsourcing in such areas as software development are also becoming competitive multinationals, opening offices in the U.S., Britain and Canada to supplement their Indian operations. All five of the major Indian-based global outsourcers have software development facilities in Canada, as do the major U.S.-based outsourcers (SHRC 2004). Canadian companies also outsource cross-border. CIBC, for example, outsources credit card processing to U.S. service providers.

Though many commentators claim that the globally outsourced services market is large, there is actually little evidence that companies currently outsource a large proportion of their service functions internationally. Despite advances in

technology, many service functions — haircuts and restaurants, for example — cannot generally be traded internationally. Further, of those services that can be and are traded, not all can be outsourced globally. While payroll and accounting functions and other commercial services may be acquired abroad as intermediate components of final products, tourism services — though tradable — cannot be outsourced globally. In short, most service production is not traded internationally, and of the production that is, only a proportion can potentially be outsourced globally, and only a part of that is actually realized.

To put this activity in perspective, global services outsourcing accounted for approximately $40 billion in 2001 (MGI 2003), about 0.2 percent of global services trade, which totaled $2.3 trillion. That is about one quarter of the estimated $170 billion global market for domestic services outsourcing (UNCTAD 2004). A British survey also found a much more limited volume of global outsourcing by U.K. companies than public commentaries imply (Cronin et al. 2004).

In future, MGI (2003) estimates that the volume of global outsourcing from the U.S. will increase by 30 percent-to-40 percent per year until 2008. There was no increase, however, in the volume of global outsourcing of services for 2003 (Drezner 2004), making it debatable whether actual levels of global outsourcing will match such predictions. Privacy and control considerations may limit the scope for outsourcing.

The Canadian Picture

There are no hard indicators available on Canada's global in-sourcing and outsourcing activity. To get a better sense of the extent to which Canada is participating in the global fragmentation of service provision, this paper surveys indirect indicators, such as services trade and employment, and supplements them with data on manufacturing and some unofficial services information.

Specialization and Foreign Content

Canadian manufacturers appear to be specializing more. Companies were much more specialized by 1997 than they had been in the early 1970s (Baldwin et al. 2002).[4] This suggests that companies have restructured to focus on those goods they make relatively more efficiently and it is consistent with a tendency to import parts that others can make relatively more efficiently. Though the same analysis for services is unavailable, a similar reorganization may take place or may already be taking place in that area.

Manufacturers increasingly outsource the production of intermediate components globally. Canada experienced an increase to 20 percent from 16 percent in its share of imported intermediate components in manufacturing industry output over the 1974-to-1993 period (Campa and Goldberg 1997). Canadian companies are also increasingly importing intermediate inputs globally that are later re-exported as final goods and services. The import content in Canadian exports rose to one-third in 1999 from one-quarter in 1989 (Cross 2002).

4 U.S. companies are also specializing more, as Antràs and Helpman (2004) document.

Auto exports had an import content of 50 percent in 1999. Foreign content for service exports was relatively lower than that for goods, but increased slightly over the 1990s. Business and financial service exports had an import content of about 10 percent in 1999.

Services Trade

Box 1 describes some of the difficulties involved in measuring and defining services trade and in extracting information on services outsourcing from trade statistics.

Before examining the services trade data itself, it is useful to note that most domestic output is in services rather than manufactures, and that a much smaller share of services than manufactures is traded. Though we could speculate about the volume of potentially tradable services, we do know how much of production is actually traded. In 2002, approximately 6 percent of services production was exported — compared with 53 percent of exports of Canadian goods shipments — and 6 percent of services production was imported.

Overall Services Trade

Though there are no direct measures of in-sourcing and outsourcing currently, if Canadian firms were in-sourcing significant amounts of service functions, the data would show significant increases in service exports in sectors where in-sourcing is considered to be prevalent, and much larger export increases than for services that do not have the potential to be outsourced. Similarly, if Canadian companies were outsourcing large amounts of business functions globally, the trade statistics would show large increases in imports in those sectors.

According to the balance of payments statistics, Canada exported $56 billion of services in 2003 and imported $68 billion — equivalent to 12 per cent of total exports and 17 percent of total imports of goods and services. The deficit widened slightly from 2001 to 2003 as service exports fell by 4 percent and imports rose by 1 percent. Service imports as a share of services production, however, declined to 6 percent from 7 percent from 1999 to 2003[6], including a decline over 2002/2003. If Canada's service production needs were increasingly met by global services outsourcing, rather than seeing this decline in imports as a share of production, there would likely be an increase.

Commercial Services Trade

Many commercial services can be provided electronically or handled by telephone, so they could be purchased globally as inputs into final products. Commercial services that could be outsourced might include insurance, financial services, computer and information services, research and development, communications

6 Provided data are available, I use the 1999-to-2003 period for both trade and employment data throughout the paper for consistency. I choose 1999 as the starting point in order to avoid capturing artificially high employment in 2000 in the technology sector due to Y2K fears and the dot-com bubble.

Box 1: *Services Trade Data Issues*

The nature of trade in services makes its measurement more difficult than is the case with goods trade. Services, unlike physical goods, are difficult to define. One definition is that services are a transaction involving an agreement to perform certain tasks. The General Agreement on Trade in Services outlines four types of services-trade delivery:

1. Cross-border supply, in which services flow from one country into another;
2. Consumption abroad, in which a consumer travels abroad to obtain a service;
3. Commercial presence, where a service supplier leases or owns premises in another territory in order to provide a service, and
4. Movement of individuals, where people temporarily move abroad to provide a service.

In the case of goods trade, data are collected as part of customs duty declarations; however, for services to be traded, no physical package has to cross a border. As a result, Statistics Canada draws its services trade figures primarily from regular surveys of businesses, supplemented by administrative records. The coverage tends to be better for exports than for imports, though import data are reconciled annually with U.S. export data.

Services statistics are not designed to answer questions about the extent of global services outsourcing. Those seeking information specifically about outsourcing as defined here would want to know the value of activity in which companies imported service inputs globally to be used as part of their final package. This would involve being able to separate out trade data into those services supplied cross-border, rather than through other modes, and also being able to look exclusively at trade in service functions to be used as components of final products rather than an aggregated number that also includes trade in final products.

The traditional services trade data, however, combine all services that are supplied cross-border, consumed abroad, and part of that trade that involves individuals who move temporarily to the consumer country. As well, export and import data do not distinguish trade in service functions as inputs into final products from trade in final products.

In order to examine the degree to which outsourcing plays a role in Canadian economic activity relative to other types of services trade, we need a reliable measure of total services trade. Traditional services statistics likely underestimate the total trade because they do not include some of those services traded through the movement of individuals or through firms that have set up a commercial presence abroad. Consequently, looking at estimates of outsourcing activity as a share of trade volumes measured by traditional statistics would likely overestimate outsourcing activity. New Statistics Canada data on Canadian-owned foreign affiliates measure services traded through commercial presence, and help provide a more complete assessment of total services exports. In 2002, foreign affiliates of Canadian-based firms sold 2.5 times the level of service exports recorded in Canada's balance of payments.[5]

Determining the degree to which global outsourcing is primarily intra-firm or between a multinational (or other company) and an independent supplier may also help paint a more detailed picture of the nature of the activity. This information, as well, is difficult to gauge from trade statistics. Though the balance of payments data do distinguish between intra-firm and non-affiliated trade, these are not broken down specifically for cross-border trade, nor for service components to be used in final products. To get a precise measure of intra-company activity we would need a firm-level analysis and none is available at present (Antràs and Helpman 2004).

Given the problems inherent in measuring services activity, it would be prudent to interpret such data with caution.

5 This is similar to Assanie and Woo's (2004) finding that in 2002, Canadian firms had 2.5 times more sales of commercial services in India than reported in official cross-border commercial sales figures for 2001.

Table 1: *Exports, imports, trade balance, and changes, 1999 and 2003*
Selected commercial services with potential to be outsourced globally

	1999			2003			Changes 1999-2003		
	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance
Service Category		*($millions)*					*(%)*	*(%)*	*($millions)*
Communications	2,175	2,077	98	2,363	2,246	117	9	8	19
Insurance	3,316	4,410	-1,094	4,525	6,996	-2,471	36	59	-1377
Other financial	1,199	1,844	-645	1,487	2,515	-1,028	24	36	-383
Computer and information	2,963	1,294	1,669	3,189	1,437	1,752	8	11	83
Management	2,693	4,247	-1,554	4,033	5,079	-1,046	50	20	508
Advertising	322	517	-195	538	642	-104	67	24	91
R&D	3,208	1,561	1,647	2,896	1,374	1,522	-10	-12	-125
Architecture, engineering, technical	2,326	1,369	957	3,416	1,908	1,508	47	39	551
Misc. business	3,645	4,238	-593	3,800	4,239	-439	4	0	154
Total commercial services	*27,483*	*30,110*	*-2,627*	*33,551*	*37,119*	*-3,568*	*22*	*23*	*-941*

Source: Statistics Canada; author's calculations.

services, architectural and engineering services, management services, advertising services and miscellaneous business services.

Table 1 shows exports, imports, the trade balance, and changes in these indicators for 1999 and 2003 in commercial services categories that have the potential to be digitized or handled by phone — and outsourced globally.

As the table shows, Canadians exported $34 billion and imported $37 billion in commercial services in 2003.[7] The commercial services deficit grew by 36 percent over the 1999-to-2003 period. This is low compared with a rise of almost 70 percent for the overal services during the same period. Given this, a marked new trend of larger commercial services outsourcing flows relative to in-sourcing seems unlikely.

Also, the commercial services trade deficit with the U.S. remained relatively stable over the past few years, and was $5.1 billion in 2003. Both exports and imports remained relatively stable as well. If there had been a large increase of U.S. companies outsourcing commercial service components to Canada in recent years, we would instead observe a marked decline in that deficit.

Table 1 also shows that all categories, except for R&D, have experienced increases in both exports and imports over the period.[8] For insurance services, the trade deficit increased by more than the overall services deficit increase, while for financial services, the deficit rose by more than the commercial services average, but by less than the overall services average. The magnitude of these changes is small, so the data do not appear to suggest any significant new global outsourcing trends in these industries.

7 Canada imported about 3 percent of the world's commercial services in 2002, a similar amount to China and Ireland, and less than most large European countries and Japan (GAO 2004).

8 The data to examine these same commercial service categories in terms of the Canada-U.S. trade balance are unavailable.

Table 2: *Global IT and business process outsourcing destinations, 2001*

Country	Globally outsourced services market size ($ Billions)
Ireland	12.9
India	11.9
Canada	5.7
Israel	4.6
China	1.7
Mexico	0.8
Australia	0.6
Eastern Europe	0.6
Philippines	0.5
Russia	0.3
Thailand	0.1

Source: MGI (2003); author's calculations.

Computer and information services have received much attention in the outsourcing debate, but traditional trade data do not appear to pick up significant new outsourcing trends in this industry. Exports and imports increased slightly by similar shares from 1999 to 2003, though both declined slightly from 2002 to 2003.

In architecture, engineering and technical services, exports grew significantly increasing the trade surplus in that category. Exports grew faster than imports for management services, reducing the trade deficit. The export growth in these categories might suggest that Canada is in-sourcing more. This conclusion, however, is speculative because outsourcing represents only a subset of these data, and there are other possible explanations.

Drawing from other data sources may help form a more complete picture of Canada's role in global outsourcing. MGI (2003) estimates the value of IT and business process (BP) outsourcing by destination for 2001 (Table 2), using a variety of industry, media and other sources. Business process generally refers to the management, delivery, and operation of a typically IT-intensive process, such as back-office or call center operations.

According to the data in Table 2, Canada was the third largest destination country for such activities, with $5.7 billion of in-sourcing.[9] If this is an accurate estimate, what does it represent in terms of overall Canadian services trade and economic activity? It accounts for about 10 percent of 2001 services exports as reported in Canada's balance of payments, or about 2.5 percent of services exports when sales of Canadian affiliates abroad are added, and less than one percent of all Canadian services production in 2001. Therefore, though Canada appears to be an important destination for global services outsourcing relative to other countries, the total value of the production the country receives is still likely small, relative to other services trade and production.

9 At the end of 2002, the value of Canada's IT and BP in-sourcing increased to $6 billion, according to correspondence with McKinsey Global Institute. For Canada, MGI (2003) cites figures from NASSCOM, India's association of software and service companies, which surveys its members.

Intra-Firm and Arm's Length Outsourcing

Though public anxiety does not distinguish between global component trade within multinationals and trade that is subcontracted out, I consider briefly what the limited data tentatively enable us to say about these two types of trade.

If much trade takes place intra-company, we might expect that any services outsourcing would also be more likely to take place within the same company. Most commercial services categories — though not all — have high shares of trade between related parties. For example, in 2002, intra-firm export and import shares of total trade were relatively high for research and development (81 percent; 79 percent), management services (73 percent; 80 percent), miscellaneous business services (59 percent; 78 percent), computer and information services (30 percent; 44 percent), and insurance services (44 percent; 37 percent). For communications services, by contrast, only 12 percent of exports and imports took place intra-firm. For architecture, engineering, and technical services, 13 percent of exports were intra-firm in 2002 and 26 percent of imports moved intra-firm.

For some commercial services, Canada's arm's length outsourcing and in-sourcing with the U.S. may be more important compared with other countries' outsourcing and in-sourcing with that country. U.S. trade statistics indicate that Canada imported over 10 percent of U.S. unaffiliated exports of business, professional and technical services in 2002. Some of these imports could include Canadian outsourcing. Canada exported almost a quarter of total U.S. imports of such services, ranking as the top source country for U.S. imports (GAO 2004). Such exports might include Canadian in-sourcing. Almost three-quarters of these Canadian exports were in computer and data processing.

Overall

Taken together, the services trade data suggest that Canada is currently a relatively important destination in terms of IT and business process global outsourcing and that Canadian exports account for a large share of arm's length U.S. business services imports. Overall, though, in-sourcing activity represents a small amount of total services production, most of which must be produced where it is consumed. The data present little evidence of a large recent shift by Canadian firms to engage in significant amounts of global outsourcing and in-sourcing of service functions.

Services Employment

A common concern raised in the U.S. debate is that service sector jobs in developed nations, particularly skilled, high-paying jobs previously immune to international competition, will be lost to developing nations. Focusing on job gains and losses directly attributable to outsourcing fails to recognize the indirect gains from global outsourcing that are likely to flow through the economy and to all consumers, regardless of whether the activity takes place in Canada or elsewhere. Further, when the number of jobs in a particular sector falls, there is no way to determine if those jobs were regained in another sector, made obsolete by technology, or relocated abroad (Mann 2003).

Moreover, estimates of employment gains and losses are often considered in isolation from overall economic activity and total job turnover. A widely cited U.S. study predicted that global services outsourcing would lead to a net loss of 3.3 million jobs between 2000 and 2015 (McCarthy 2002).[10] While this may sound alarming, it represents less than 1 percent of U.S. gross job turnover. According to the U.S. Bureau of Labor Statistics, relocation overseas accounted for less than one percent of non-seasonal extended mass layoffs over 2003. Technical change is a far more important cause of job losses. As well, almost all of these layoffs were in the manufacturing sector.

A number of U.S. studies (Kirkegaard 2004, Mann 2003, and Bardhan and Kroll 2003) show that the relative scope of job losses due to global outsourcing is limited and that most jobs lost due to outsourcing are low-wage. Kirkegaard (2004) makes a similar observation for European labour markets, noting a limited volume of job losses due to international outsourcing, relative to other causes. One European study estimates that outsourcing from Austria to Eastern Europe accounts for one quarter of the shift in Austrian employment towards high-skilled jobs (cited in Liikanen 2004). There have been no estimates of current or future Canada-wide employment gains and losses due to global outsourcing, as far as this author is aware.

Considering employment changes in the context of overall economic activity is helpful background for examining Canada's overall services employment picture. Because there are no detailed data on employment changes resulting from global outsourcing, this paper looks at some indirect indicators and draws tentative conclusions. It is important to recall that the trade data do not appear to suggest shifts in outsourcing and in-sourcing sizeable enough to have played a large role in shaping employment trends. And, as already discussed, most services must be produced locally, so even though services-producing industries accounted for 77 percent of total Canadian employment in 2003, only a small share of that relates to service functions that may be outsourced. Also recall that job losses and gains typically add up to one quarter of total Canadian employment, dwarfing any job changes associated with global outsourcing.

One way to tell if a job can be outsourced globally is if it involves mostly "sitting at a desk, talking on the phone and working on a computer", as Bardhan and Kroll (2003) note. Following that reasoning, service functions that firms could outsource or in-source globally include:

- Financial services, back-end processing (data entry, transactions, document management);
- Corporate functions (accounting, human resources, procurement, IT maintenance);
- Knowledge services and decision analysis (customer analysis, portfolio analysis, claims processing, and credit underwriting);
- Research and development (engineering and design, testing, and product optimization), and

10 A revised estimate by the same group suggests a loss of 3.4 million white-collar jobs by 2005.

- Telemarketing, medical transcription, tax preparation, computing coding, payroll, loan processing, software development, auto and aerospace component design and pharmaceuticals research.

This group contains both low value-added and higher value-added activities. In the near term, it seems safe to assume that business tasks that can be standardized, such as data entry and IT support, are more likely to be outsourced globally than more complex tasks, such as R&D and marketing.

To get a sense of how much of services employment can potentially be globally outsourced, I add up broad industry categories that each include some activities with outsourcing potential. The categories add to about 19 percent of total 2003 services employment.[11] This is obviously an overestimate, but can be considerd a rough upper-level estimate of employment that has the potential to be affected by global services outsourcing.

Overall Services Employment and Trade

Unlike the U.S. employment profile, which has in large part fueled the outsourcing debate in that country, the Canadian services employment picture has been generally positive in recent years. Employment in service-producing industries in Canada grew by 11 percent from 1999 to 2003, more than the 8 percent increase for goods-producing industries over the same period. Though Canadian manufacturing employment declined in the first half of 2004, services employment rose steadily over that period.

Table 3 compares trade and employment performance in selected service sectors for 1999 and 2002.[12]

Most of these sectors had increases in their trade surpluses and higher employment; even in finance and insurance where the trade deficit increased, employment rose by 7 percent, giving little cause for concern in Canada about job losses due to outsourcing.

Professional and Business Services

Though focusing on job gains and losses and outsourcing in a particular sector can be misleading when benefits from outsourcing are likely to spread through the

11 These 2-digit North American Industrial Classification System (NAICS) categories are: information and cultural industries; finance and insurance; professional, scientific and technical services; management of companies and enterprises, and part of administrative and support services.

12 Statistics Canada recently published services trade data in NAICS format, making it possible to match trade with employment data in NAICS format. Unfortunately, these trade data are only available until 2002 and industry categories are highly aggregated. I use employment by industry rather than by occupation as used by others, such as McCarthy (2002), because developments like the business cycle that affect the overall economy will generate employment changes in occupational categories, and the focus here is on changes attributable to technological advances allowing global outsourcing of service functions. As well, employment by industry under NAICS not only allows matching trade and employment data but also enables comparisons between Canada and the U.S. Data are from Statistics Canada's Survey of Employment, Payrolls, and Hours (SEPH), instead of from the Labour Force Survey, because SEPH estimates are more suitable as indicators of employment change over detailed industry group levels.

Table 3: *Trade balance and employment for selected services, 1999 and 2002*

North American Industrial Classification System (NAICS)-based category	Trade balance		Employees	
	1999	2002	1999	2002
	($ millions)			
Information, culture and arts	1,096	932	495,352	566,583
Finance and insurance	-1,972	-3,188	530,863	568,837
Professional, scientific and technical services	3,768	4,440	557,489	653,510
Management of companies and enterprises	-150	186	75,665	89,191
Other services producing industries	75	159	208,684	227,985
Information and communication technology	4,339	4,357	*	*
Total, services producing industries	*3,712*	*3,818*	*9,188,697*	*10,003,693*

Source: Statistics Canada; author's calculations.

*Employment data unavailable in the same aggregation.

Table 4: *Employment for professional and business services for Canada and the U.S., 1999-2003*

North American Industrial Classification System (NAICS) 4-digit category	Employees		Change 1999-2003		Change 2002-2003	
	Canada	U.S.	Canada	U.S.	Canada	U.S.
	(2003)		*(%)*		*(%)*	
Legal	64,263	1,136,800	12	8	2	2
Accounting, tax preparation, bookkeeping and payroll	68,736	815,600	6	-3	2	-3
Architectural, engineering and related	130,966	1,228,000	6	5	-1	-1
Specialized design	15,004	121,400	14	-3	-3	-2
Computer systems design and related	141,991	1,108,900	20	-2	-2	-4
Management, scientific and technical consulting	94,624	747,300	17	15	0	2
Advertising and related	39,798	430,400	9	-9	-2	-2
Other professional, scientific and technical	56,580	492,600	51	10	11	1
Total	*611,962*	*6,081,000*	*15*	*3*	*0*	*-1*

Source: Statistics Canada; author's calculations.

economy, I briefly examine a few sectors in order to respond to public debate. Table 4 compares the Canadian and U.S. employment records for professional and business services, industry categories that contain likely candidate categories for global outsourcing activity.

As Table 4 shows, Canada's average employment rose by 15 percent from 1999 to 2003 in these sectors, in contrast to only a 3 percent rise in U.S. employment. Canadian employment gains in these sectors exceed the 8 percent increase in total Canadian services employment. Several sectors had double digit increases in

employment during the 1999-to-2003 period. Average employment in these sectors remained stable from 2002 to 2003, with some categories posting slight declines compared with a 2 percent average gain for total services employment. There is no evidence to suggest that these slight declines are attributable to global outsourcing.

IT Services

Some commentators have raised particular concern about potential job losses because of global outsourcing in the IT services sector.[13] The main elements of IT services are: software publishing, computer systems design (part of business and professional services), data processing, and telecommunications.

Overall employment in this sector has been relatively stable since the end of 2001 (after the dot-com bubble burst). Some ICT service industries have had slight declines in employment: Systems design employment fell from 2001 to 2003, employment in data processing declined by 2 percent and in software publishing by 4 percent from 2002 to 2003. Overall, however, software and computer services employment rose in the first half of 2004. And though there was a slight decline in telecommunications services in the second quarter of 2004, the sector actually grew by 9 percent from 1999 to 2003 — including growth in 2002/2003 and in the first quarter of 2004 — compared with a decline of about 8 percent in the U.S. from 1999 to 2003. There is no evidence to suggest that Canada is losing large numbers of IT services jobs, nor is there evidence to indicate that any relatively small employment declines in some IT services sectors are related to global outsourcing, rather than to other factors.[14]

Call Centres

Has global outsourcing affected Canadian call center employment? Such provinces as New Brunswick, for example, have deliberately pursued a strategy to attract global call centre activity. Eleven percent of export-oriented FDI projects in call centres went to Canada from 2002 to 2003 (UNCTAD 2004). Employment data for call centres are included in the broader category of business support services, which also includes collection agencies, credit bureaus, and business service centres. Canada had an employment increase of 75 percent in business support services over the 1999-to-2003 period, most of which occurred since 2002, compared with a decline of about 4 percent in the U.S. This rise may indicate that Canada is increasingly attracting outsourced call center production.

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13 See, for example, Nicolas Van Praet. July 15, 2004. "CGI Silent on India Outsource Report." *Montreal Gazette*. B2.

14 One study predicts that Canada could have, at best, an increase of 165,000 skilled IT services jobs by 2010 and, at worst, a decrease of 75,000 such jobs due to global outsourcing (PricewaterhouseCoopers 2004). Unfortunately, the predictions are simply assumptions that are not based on any underlying analysis.

How Canada Should Respond to Global Outsourcing

To respond to global services outsourcing, Canadian decision makers should:

First, do no harm.[15] Rather than focusing on whether Canada is gaining or losing production and jobs because of global outsourcing and taking actions to stop such activity,[16] policymakers should acknowledge that growing internationalization of production, including global outsourcing and in-sourcing, as well as inward and outward FDI flows, bring net benefits to the Canadian economy. Restricting international outsourcing is equivalent to penalizing imported component parts, the producers who depend on them and their ultimate consumers. Limiting business or government use of cost-efficient labour in another country will reduce competitiveness and endanger jobs.[17]

Enhance Canada's competitiveness. Government and business leaders should rely on approaches that focus on Canada's ability to compete for services outsourcing activities, particularly higher-value added ones. As Table 2 shows, globally outsourced activity tends to cluster in a small number of economies. This happens because there are fixed costs to entry and once a particular location is established, that area will attract increasing amounts of the business.[18] To ensure that companies do not bypass Canada in favour of other locations, this country should position itself as a global services outsourcing destination by doing the following:

- Provinces must invest in training and skills development. That training will enable individuals to adapt to outsourcing, especially if activity accelerates. An absence of appropriately skilled workers in Canada will lead a U.S. or other global company looking to outsource production to Canada to look elsewhere. Education might help move Canada higher up the value chain out of direct competition with low-cost centres. A focus on skills, education and flexibility is likely to be more efficient and beneficial for Canada's economy in the long run than policies such as tax breaks and subsidies that are geared towards specific companies or industries.[19]

15 As Drezner (2004) argues.

16 Greater scope for restricting outsourcing may lie at the provincial level in terms of government procurement. Trade agreements place more limits on federal policymakers' ability (in both Canada and the U.S.) to restrict outsourcing.

17 This does not mean that all governments and businesses should outsource globally. Decision makers should carefully assess privacy concerns, economic benefits and costs, and other considerations before proceeding, just as they would when considering outsourcing domestically.

18 Daniel Trefler made this point in his presentation on "International Trade, Growth and Domestic Institutions" to the Canadian Economics Association meetings, June 4, 2004.

19 Some commentators in the U.S. say that traditional assistance for workers to upgrade their skills might be augmented with health care and wage subsidies for up to two years for employees displaced by competition from trade who find new jobs (Kletzer and Litan 2001). For Canada, the generally available employment insurance system is likely to be a more effective response to dislocation from import competition than a program geared specifically to job losses due to outsourcing.

- Governments should pursue other measures to improve domestic competitiveness such as those outlined in Mintz (2001). The OECD (2004) also points to the importance of labour market flexibility.

- Canada should further liberalize its services trade. Such action might improve Canada's ability to attract more services outsourcing, particularly higher value-added activity. Liberalization of services trade is essential to boosting international competitiveness, especially for such a relatively small-population country as Canada (Copeland 2002). Relaxing investment restrictions might be particularly important in encouraging foreign direct investment and intra-firm in-sourcing in sectors with a higher degree of trade between parent companies and their affiliates.

- Governments should enhance international labour mobility. If international services outsourcing becomes increasingly prevalent, greater national and international labour mobility may also be important to enable workers to migrate if production moves, though technological advances may reduce pressures for labour movements.

Improve data. Services trade is inherently difficult to measure. Current statistics are not designed to identify outsourcing and in-sourcing activity as a component of that trade. There are challenges and trade-offs associated with gathering such information, since it requires data on individual company transactions, and firms may be reluctant to divulge information they view as private and politically sensitive.

To arrive at informed decisions, however, government and business leaders need indicators that meaningfully describe the nature of Canadian services trade and investment in a world where multinationals and other companies operate through global supply chains. Statistics Canada should therefore strive to improve its assessments of overall services trade and to understand better the nature and effects of that trade. This would include developing better indicators of in-sourcing and outsourcing activity, without focusing on such activity as distinct from other forms of trade. It should also include more detailed information on service sales of foreign affiliates of Canadian companies and Canadian-based affiliates of foreign firms.

Forestall U.S. protectionist actions. Canadian diplomats and trade officials should work to ensure that U.S. politicians do not pass legislation restricting outsourcing. Though President George W. Bush argues that outsourcing is good for the United States, there are still a number of outstanding proposals at both the federal and state levels that aim to restrict global outsourcing. Senator Joseph Lieberman (2004) lists 13 such federal legislative proposals and notes that 33 states have introduced similar bills since May 2003. The bills ban or restrict the use of foreign labour in government contracts, targeting practices such as contracting call center operations to private firms that subcontract work outside of the U.S.

Such initiatives could harm both Canadian and U.S. interests. Canada stands to lose in-sourced activities, and because the two economies are so highly integrated, any restrictions would immediately affect the competitiveness of U.S.,

as well as Canadian, companies. Also of potential concern are less transparent regulatory barriers, such as qualifications or labour standards that could be used to restrict outsourcing (Mattoo and Wunsch 2004).

The U.S. initiatives may not be as alarming as they seem. Most U.S. state bills — of which few have been passed to date — relate to government procurement activity, which accounts for only a small portion of overall global outsourcing. Also, the U.S. debate may fade as employment picks up and wages in such nations as India rise, making outsourcing to such countries less attractive.

Conclusion

Outsourcing is the global fragmentation of services production as companies acquire business segments along international supply chains. The anecdotes that dominate the debate surrounding the process rarely highlight the overall gains from outsourcing that permeate the economy. As with other forms of trade, there will be temporary dislocation and restructuring, but global outsourcing is likely to ultimately result in increased productivity, lower prices, and higher living standards. Just as declines in transportation costs led to global supply chain production for goods, declines in telecommunications costs and the ability to digitize service functions have made it increasingly possible and attractive to outsource business functions.

There is still much to be learned about current and future global services outsourcing. Despite the data limitations, what is known is that Canadian manufacturing companies rely increasingly on internationally produced intermediate components both for domestic and export production, though the same development does not yet appear in the services data. Still, as opportunities to disaggregate the production of services across international boundaries increase with technological advances, there may be significant growth in Canada's outsourcing and in-sourcing of service functions. As with other forms of trade, this will result in short-term dislocation for some, and overall long-term net benefits in increases in productivity, lower prices for consumers, and higher living standards for Canada and developing countries.

At the moment, most services must still be produced locally and only a small proportion of them can be outsourced. Far more outsourcing of services takes place within countries than between countries. While commentators tend to focus on outsourcing from the U.S. to developing countries, Canada appears to be among a few key destinations for outsourced service activities, though the magnitude of the country's outsourcing and in-sourcing activity is still likely small, relative to overall economic activity. The trade and employment data do not reveal any radical shifts suggesting large recent increases in in-sourcing or outsourcing activity. Canada's employment situation in recent years has been unlike that in the U.S., with most work categories that include service jobs that could be outsourced posting gains. Canada should continue to monitor economy-wide developments, while viewing job losses in the context of the dynamic Canadian economy that continuously creates and destroys jobs.

In responding to the outsourcing debate, a few priorities are clear. Policymakers should not restrict Canadian companies' ability to invest and outsource abroad. They should enhance Canada's ability to compete for globally outsourced activity, as well as workers' ability to adjust to changing circumstances, by investing in education and skills development, liberalizing services, and taking other steps to improve competitiveness. The country should also be vigilant in protecting its interests against U.S. protectionist actions, in order to maintain Canadian living standards.

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NOTES

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